

103^D CONGRESS
1ST SESSION

S. 1200

To amend the Stevenson-Wydler Technology Innovation Act of 1980 to establish the National Quality Commitment Award with the objective of encouraging American universities to teach total quality management, to emphasize the importance of process manufacturing, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JULY 1 (legislative day, JUNE 30), 1993

Mr. DOMENICI introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To amend the Stevenson-Wydler Technology Innovation Act of 1980 to establish the National Quality Commitment Award with the objective of encouraging American universities to teach total quality management, to emphasize the importance of process manufacturing, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “National Quality Com-
5 mitment Award Act of 1993”.

1 **SEC. 2. PURPOSE.**

2 It is the purpose of this Act to provide for the estab-
3 lishment and conduct of a national commitment to quality
4 award program under which awards are given to institu-
5 tions of higher education that—

6 (1) teach effective total quality management;

7 (2) reorient their education programs to empha-
8 size the value and prestige of pursuing careers in
9 process manufacturing engineering;

10 (3) apply total quality management to the oper-
11 ations of their institution of higher education; and

12 (4) apply total quality management in their
13 joint research and development contracts with pri-
14 vate industry.

15 **SEC. 3. AWARD PROGRAM.**

16 The Stevenson-Wydler Technology Innovation Act of
17 1980 (15 U.S.C. 3701 et seq.) is amended by adding at
18 the end the following new section:

19 **“SEC. 22. NATIONAL COMMITMENT TO QUALITY AWARD**
20 **PROGRAM.**

21 **“(a) PROGRAM ESTABLISHED.—**

22 **“(1) IN GENERAL.—**The Secretary shall carry
23 out an award program to be known as the National
24 Commitment to Quality Award Program.

25 **“(2) CONTENTS.—**In carrying out the award
26 program described in paragraph (1), the Secretary—

1 “(A) shall conduct a competition and make
2 monetary awards in accordance with subsection
3 (b)(1);

4 “(B) may make special awards in accord-
5 ance with subsection (b)(2); and

6 “(C) shall provide each recipient of such a
7 monetary or special award with a medal de-
8 scribed in paragraph (3).

9 “(3) MEDAL.—Each recipient of an award
10 under this section shall receive a medal bearing the
11 inscriptions ‘National Commitment to Quality
12 Award’ and ‘The Quest for Excellence’. The medal
13 shall be of such design and materials and bear such
14 additional inscriptions as the Secretary may pre-
15 scribe.

16 “(4) DESIGNATION.—Awards under this section
17 shall be known as National Commitment to Quality
18 Awards.

19 “(b) AWARDS.—

20 “(1) COMPETITION FOR MONETARY AWARDS.—

21 (A) From amounts appropriated pursuant to the au-
22 thority of subsection (j), the Secretary shall periodi-
23 cally conduct a competition and make at least 3
24 monetary awards to institutions of higher education
25 in accordance with the provisions of this section.

1 “(B) The monetary awards described in sub-
2 paragraph (A) shall be in an amount equal to—

3 “(i) \$3,000,000 for the institution of high-
4 er education receiving first place in the competi-
5 tion described in subparagraph (A);

6 “(ii) \$2,000,000 for the institution receiv-
7 ing second place in such competition;

8 “(iii) \$1,000,000 for the institution receiv-
9 ing third place in such competition; and

10 “(iv) not more than \$1,000,000 for any
11 other such institution receiving an award pursu-
12 ant to such competition.

13 “(2) SPECIALIZED AWARDS.—(A) From
14 amounts appropriated pursuant to the authority of
15 subsection (j), the Secretary may award to any insti-
16 tution of higher education that excels in teaching or
17 practicing either total quality management or proc-
18 ess manufacturing engineering services productivity
19 improvement a specialized award.

20 “(B) The specialized award described in sub-
21 paragraph (A) shall be in an amount which is not
22 more than \$500,000.

23 “(3) APPLICATION FEE PROHIBITED.—The Sec-
24 retary shall not charge an institution of higher edu-

1 cation a fee in order to apply for or receive an award
2 under this section.

3 “(c) MAKING AND PRESENTATION OF AWARDS.—

4 “(1) IN GENERAL.—The President (on the
5 basis of recommendations received from the Sec-
6 retary), or the Secretary, shall periodically make
7 awards to institutions of higher education which in
8 the judgment of the President or the Secretary have
9 substantially benefited the economic and social well
10 being of the United States through activities that—

11 “(A) teach effective total quality manage-
12 ment techniques and approaches;

13 “(B) demonstrate continuous improvement
14 in the institution’s total quality management
15 curriculum;

16 “(C) emphasize the value and prestige of
17 pursuing careers in process manufacturing en-
18 gineering;

19 “(D) demonstrate continuous improvement
20 in the institution’s education program through
21 application of total quality management prin-
22 ciples within the institution; and

23 “(E) demonstrate commitment and appli-
24 cation of total quality management principles in

1 joint research relationships that the institution
2 maintains with private industry.

3 “(2) PRESENTATION CEREMONY.—The presen-
4 tation of the awards under this section shall be
5 made by the President or the Secretary with such
6 ceremonies as the President or the Secretary may
7 deem proper.

8 “(3) PUBLICATION AND INELIGIBILITY.—An in-
9 stitution of higher education to which an award is
10 made under this section, and which agrees to help
11 other institutions of higher education improve their
12 total quality management curriculum may publicize
13 its receipt of such award, but such institution shall
14 be ineligible to receive another such award for a
15 period of 5 years.

16 “(4) USE OF AWARD.—An institution of higher
17 education receiving an award under this section shall
18 use the proceeds of such award to further improve
19 the total quality management and process manufac-
20 turing engineering curriculum of such institution.

21 “(d) AWARD CRITERIA.—

22 “(1) IN GENERAL.—Awards under this section
23 shall be made to qualifying institutions of higher
24 education that place an emphasis on—

1 “(A) total quality management, includ-
2 ing—

3 “(i) leadership in teaching how to cre-
4 ate a quality culture;

5 “(ii) leadership in teaching informa-
6 tion and analysis such as statistical proc-
7 ess contracts for quality improvement;

8 “(iii) the effectiveness of the institu-
9 tion’s quality improvement program to
10 teach integration of quality requirements
11 into businesses’ plans;

12 “(iv) the success of the institution’s
13 efforts to teach students how to realize the
14 full potential of the work force for quality;

15 “(v) teaching quality awareness;

16 “(vi) emphasis on customer satisfac-
17 tion;

18 “(vii) leadership in teaching how to
19 integrate the total quality management
20 philosophy; and

21 “(viii) demonstrated success in teach-
22 ing students how to instill the full potential
23 total quality management philosophy in the
24 work force;

1 “(B) the importance of process manufac-
2 turing, including—

3 “(i) leadership in teaching a better
4 understanding of market forces and indus-
5 try needs, industrial processes, and manu-
6 facturing and quality practices that are
7 driven by market pull, not science push;

8 “(ii) leadership in developing and
9 teaching a more accelerated approach to
10 research, development, and manufacturing
11 in order to teach students how to move
12 products more quickly from the basic re-
13 search phase to the commercialization
14 phase with an emphasis on teamwork;

15 “(iii) leadership in teaching better in-
16 tegration of design and production, includ-
17 ing teaching students how to design with
18 manufacturability in mind, and to focus on
19 cost-effectiveness, quality reliability, sim-
20 plicity, flexibility, and modularity; and

21 “(iv) leadership in teaching students
22 to give greater consideration to potential
23 commercial applications in the planning
24 and conduct of research and development
25 through input from potential users, and

1 closer working relationship between the na-
2 tional research laboratories, industry, and
3 universities.

4 “(e) CRITERIA FOR QUALIFICATION.—

5 “(1) IN GENERAL.—(A) An institution of high-
6 er education may qualify for an award under this
7 section only if such institution—

8 “(i) applies to the Secretary in writing, for
9 the award;

10 “(ii) permits a rigorous evaluation in ac-
11 cordance with subparagraphs (B) and (C) of
12 the success of the institution’s curriculum for
13 total quality management and process manufac-
14 turing engineering; and

15 “(iii) meets such requirements and speci-
16 fications as the Secretary, after receiving rec-
17 ommendations from the board of overseers, de-
18 termines to be appropriate to achieve the pur-
19 poses of this section.

20 “(B) In carrying out the provisions of clause
21 (ii) of subparagraph (A), the Secretary shall develop
22 evaluation criteria and procedures.

23 “(C) In applying the provisions of clause (iii) of
24 subparagraph (A) with respect to any institution of
25 higher education, the Secretary shall rely upon in-

1 tensive evaluation by the board of overseers which
2 shall—

3 “(i) review the information submitted by
4 the institution of higher education, and through
5 a site visit verify the achievements of—

6 “(I) the total quality management
7 curriculum and process manufacturing en-
8 gineering programs of such institution; and

9 “(II) such institution in practicing
10 total quality management;

11 “(ii) encompass all aspects of the institu-
12 tion of higher education’s total quality manage-
13 ment and process manufacturing engineering
14 program, as well as such institution’s future
15 goals for its total quality management and
16 process manufacturing engineering curriculum;
17 and

18 “(iii) include an analysis of whether the in-
19 stitution of higher education in practicing or
20 applying total quality management to its rela-
21 tionships with industry and in its day-to-day
22 administration of the institution.

23 “(2) CONTRACTUAL ARRANGEMENTS.—The
24 Secretary may, under appropriate contractual ar-
25 rangements, carry out the Secretary’s responsibil-

1 ities under subparagraphs (A) and (B) of paragraph
2 (1) through one or more broadbased nonprofit enti-
3 ties which are leaders in the field of quality improve-
4 ment programs and which have a history of service
5 to society.

6 “(3) RESPONSIBILITIES OF THE BOARD OF
7 OVERSEERS.—The board of overseers shall meet an-
8 nually to review the work of the Secretary or the
9 contractor and make such suggestions for the im-
10 provement of the award process as such board
11 deems necessary. The board of overseers shall report
12 the results of the award activities to the Secretary
13 each fiscal year, along with its recommendations for
14 improvement of the award process.

15 “(f) INFORMATION AND EVALUATION.—The Sec-
16 retary shall ensure that each applicant for an award under
17 this section receives the complete results of the evaluation
18 of such institution conducted pursuant to subsection
19 (e)(1)(ii) as well as detailed explanations of all suggestions
20 for improvements. The Secretary shall also provide infor-
21 mation about the awards and successful total quality man-
22 agement and process manufacturing engineering curricu-
23 lum of the award-winning institutions of higher education
24 to each applicant for an award under this section and
25 other appropriate groups.

1 “(g) FUNDING.—The Secretary is authorized to seek
2 and accept gifts and donations of property or services
3 from public and private sources to carry out the award
4 program assisted under this section.

5 “(h) REPORT.—The Secretary shall prepare and sub-
6 mit to the President and the Congress, within 3 years
7 after the date of the enactment of this section, a report
8 on the progress, findings, and conclusions of activities con-
9 ducted pursuant to this section along with a recommenda-
10 tion for possible modifications thereof.

11 “(i) DEFINITIONS.—For the purpose of this sec-
12 tion—

13 “(1) the term ‘board of overseers’ means the
14 board of overseers established pursuant to section
15 17(d)(2)(B) of this Act for the year in which the de-
16 termination is made;

17 “(2) the term ‘manufacturing process tech-
18 nology’ means engineering training which specializes
19 in understanding and implementing a manufacturing
20 process under which a high quality product is pro-
21 duced in a timely fashion, including simulative engi-
22 neering and the skills necessary for rapid represent-
23 ative prototyping;

24 “(3) the term ‘Secretary’ means the Secretary
25 of Commerce; and

1 “(4) the term ‘total quality management’ means
2 a management approach which includes—

3 “(A) systems thinking; and

4 “(B) statistical proces control, theories of
5 human behavior, leadership, and planning that
6 is quality-driven, customer-oriented, and com-
7 mitted to teamwork.

8 “(j) AUTHORIZATION OF APPROPRIATIONS.—There
9 are authorized to be appropriated such sums as may be
10 necessary for each fiscal year to carry out this section.”.

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